UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,322	11/27/2000	Vinay Deo	MS1-685US	5892

			EXAMINER
22801	7590	10/04/2004	DODDS, HAROLD E

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

ART UNIT	PAPER NUMBER
2177	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/725,322	DEO ET AL.
	Examiner	Art Unit	
	Harold E. Dodds, Jr.	2177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>16 September 2004</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-6 and 8-53</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) <u>10-19,25-27,29-32 and 39-42</u> is/are allowed.
6) ☒ Claim(s) <u>1,2,8,9,20,21,28,33,34,37,38,43-47,52 and 53</u> is/are rejected.
7) ☒ Claim(s) <u>3-6,22-24,35,36 and 48-51</u> is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>23 December 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some *   c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>7/30/04</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including

the fee set forth in 37 CFR 1.17(e), was filed in this application after final

rejection. Since this application is eligible for continued examination under 37

CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the

finality of the previous Office action has been withdrawn pursuant to 37 CFR

1.114. Applicant's submission filed on 9 August 2004 has been entered.

Drawings

2.   The formal drawings were received on 23 December 2003. These

drawings are accepted.

Specification

3.   The amendment filed 9 August 2004 is objected to under 35

U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132

states that no amendment shall introduce new matter into the disclosure of the

invention. The added material, which is not supported by the original disclosure

is as follows:

"As used herein, the term 'exposes' is used to mean 'to set forth' or 'to submit or

make assessable to a particular action or influence' or 'to make known or bring to

light' or 'to cause to be visible or open to view.'"

The modification redefines the meaning of the term "expose" as it appears

in the claims. This modification is not fully supported by other language in the

Specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.   Claim 2, 20, 30, 41, and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "exposes" in claims 2, 20, 30, 41, and 47 is used by the claim to mean "contains", while the accepted meaning is "shows." The term is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by

Tobita et al. (U.S. Patent No. 6,421,279).

Tobita anticipated independent claim 1 by the following:

"...a processor..." at col. 47, lines 26-29.

"...volatile memory and nonvolatile memory operatively coupled to the

processor..." at col. 45, lines 66-67, col. 46, lines 1-8, and col. 47, lines 26-29.

"...and a file system to manage access to one or more data files..." at col. 4, lines

58-60 and col. 31, lines 32-54.

"...stored in the volatile memory and in the nonvolatile memory..." at col. 45, lines

66-67 and col. 46, lines 1-8.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the

basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering

patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

the subject matter of the various claims was commonly owned at the time any

inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the examiner to consider the applicability of

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35

U.S.C. 103(a).

9.   Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Tobita as applied to Ginter et al. (U.S. Patent No. 6,427,140).

As per claim 2, the "...to request the one or more data files...," is taught by

Tobita at col. 7, lines 30-34,

the "...stored in the volatile memory and the nonvolatile memory....," is taught by

Tobita at col. 45, lines 66-67 and col. 46, lines 1-8,

but the "...that are used by an application..."

and the "...file system exposes a set of application program interfaces...," are not

taught by Tobita.

However, Ginter teaches the use of file systems and application program

interfaces as follows:

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"...In this example, ROS 602 includes an operating system
("OS") "core" 679, a user Application Program Interface
("API") 682, a "redirector" 684, an "intercept" 692, a User
Notification/Exception Interface 686, and a file system
687..." at col. 79, lines 24-28.
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It would have been obvious to one of ordinary skill at the time of the

invention to combine Ginter with Tobita to use application programs in order to

provide users with a means of introduce their own programs into the system to

provide additional functionality and to provide application program interfaces in

order to allow the systems programs to interface with the application programs. Tobita and Ginter teach related systems. Tobita and Ginter teach the use of computers, the use of volatile memory, the use of nonvolatile memory, the use of tables, the use of files, the use of file systems, the use of applications, and the use of functions. Tobita provides a processor with both volatile and nonvolatile memory and a file system to manage the access of data and Ginter provides application programs.

10.   As per claim 8, the "...at least one application...," is taught by Ginter at col. 9, lines 64-67,

the "...stored in the nonvolatile memory...," is taught by Tobita at col. 45, lines 66-67 and col. 46, lines 1-8,

the "...and executable on the processor...,"is taught by Tobita at col. 19, lines 65-67 and col. 20, lines 1-3,

the "...to request access to the one or more data files...," is taught by Tobita at col. 7, lines 30-34,

but.

11.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tobita as applied to claim 1 above, and further in view of Nobakht et al. (U.S. Patent No. 6,587,873).

As per claim 9, the "...embodied as a smart card...," is not taught by Tobita.

However, Nobkht teaches the use of smart cards as follows:

"...CPU 210 and system controller 211 also support a smart card access protocol..." at col. 6, lines 34-35.

It would have been obvious to one of ordinary skill at the time of the invention to combine Nobkht with Tobita to use smart cards in order to include information to the system that is specific about the owner of the smart card. Tobita and Nobkht teach the use of related systems. They teach the use of computers, the use of volatile memory, the use of nonvolatile memory, the use of tables, the use of files, the use of applications, the use of functions, and the use of integrated circuits. Tobita provides a processor with both volatile and nonvolatile memory and a file system to manage the access of data and Nobkht provides the smart cards.

12.   Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobita et al. (U.S. Patent No. 6,421,279) and Ginter et al. (U.S. Patent No. 6,427,140).

13.   Tobita renders obvious independent claim 20 by the following: "...a file system to manage access to data files..." at col. 4, lines 58-60 and col. 31, lines 32-54.

"...stored in both volatile memory and nonvolatile memory..." at col. 45, lines 66-67 and col. 46, lines 1-8.

Tobita does not teach the use of application program interfaces.

14.   However, Ginter teaches the use of application program interfaces as follows:

"...to expose the file system to applications..." at col. 79, lines 24-28.

"...and an application program interface (API)..." at col. 79, lines 24-28.

It would have been obvious to one of ordinary skill at the time of the invention to combine Ginter with Tobita to use application programs in order to provide users with a means of introduce their own programs into the system to provide additional functionality and to provide application program interfaces in order to allow the systems programs to interface with the application programs. Tobita and Ginter teach related systems. Tobita and Ginter teach the use of computers, the use of volatile memory, the use of nonvolatile memory, the use of tables, the use of files, the use of file systems, the use of applications, and the use of functions. Tobita provides a processor with both volatile and nonvolatile memory and a file system to manage the access of data and Ginter provides application programs.

15.   As per claim 21, the "...API defines a function for opening a data file...," is taught by Ginter at col. 79, lines 24-28, col. 15, lines 17-33, and col. 82, lines 32-41,

the "...function being used to open data files...," is taught by Ginter at col. 15, lines 17-33 and col. 82, lines 32-41,

and the "...in the volatile memory and the nonvolatile memory...," is taught by Tobita at col. 45, lines 66-67 and col. 46, lines 1-8.

35.

16.   Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li (U.S. Patent No. 6,519,594) and Nobakht et al. (U.S. Patent No. 6,587,873).

17.   Li renders obvious independent claim 28 by the following:

"...and facilitate access to the volatile data file by one or more applications..." at

col. 5, lines 47-55 and col. 6, lines 31-37.

"...store data in a volatile data file within volatile memory..." at col. 5, lines 47-55.

Li does not teach the use of smart cards.

18.   However, Nobakht teaches the use of smart cards as follows:

"...of the smart card..." at col. 6, lines 34-35.

It would have been obvious to one of ordinary skill at the time of the

invention to combine Nobakht with Li to use smart cards in order to include

information to the system that is specific about the owner of the smart card. Li

and Nobakht teach the use of related applications. They teach the use of

computers, the use of networks, application program interfaces, and operating

systems, the use of volatile memory, the use of nonvolatile memory, the use of

tables, the use of files, the use of applications, and the use of functions. Li

provides access to volatile memory from applications and the storing of volatile

data and Nobakht provides the smart card.

19.   Claims 33, 34, 37, 38, and 43-45 are rejected under 35 U.S.C.

103(a) as being unpatentable over Ginter et al. (U.S. Patent No. 6,427,140), Li

(U.S. Patent No. 6,519,594), and Nobakht et al. (U.S. Patent No. 6,587,873).

20.   Ginter renders obvious independent claims 33 and 38 by the

following:

"...of an integrated circuit module..." at col. 59, lines 52-53 and col. 65 lines 65-

67.

"...receiving, from a requestor, a request..." at col. 81, lines 61-64.

"...on the integrated circuit module..." at col. 59, lines 52-53 and col. 65 lines 65-67.

Ginter does not teach accessing data in volatile memory and evaluating whether a requester is authorized.

21.   However, Li teaches accessing data in volatile memory as follows: "...storing data in a volatile data file in volatile memory..." col. 5, lines 47-55 and col. 6, lines 34-38.

"...to access the volatile data file..." col. 5, lines 47-55 and col. 6, lines 34-38.

"...to access the volatile data file..." col. 5, lines 47-55 and col. 6, lines 34-38.

"...locating the volatile data file in the volatile memory..." col. 5, lines 47-55 and col. 6, lines 34-38.

It would have been obvious to one of ordinary skill at the time of the invention to combine Li with Ginter to locate, access, and store data in volatile memory in order have rapid access to data in memory. Ginter and Li teach the use of related applications. They teach the use of computers, the use of networks, application program interfaces, and operating systems, the use of volatile memory, the use of nonvolatile memory, the use of tables, the use of files, the use of applications, and the use of functions. Ginter provides receiving requests and integrated circuit modules and Li provides access to volatile memory from applications and the storing of volatile data.

Li does not teach evaluating whether the requestor is authorized.

22.   However, Nobacht teaches evaluating whether the requestor is authorized as follows:

the "...evaluating whether the requestor is authorized..." is taught by Nobakht at col. 8, lines 39-41,

the "...and in an event that the requestor is authorized..." is taught by Nobakht at col. 8, lines 39-41,

It would have been obvious to one of ordinary skill at the time of the invention to combine Nobakht with Ginter and Li to evaluate whether the requestor is authorized in order to protect the security of the system and allow only authorized users access to the system data. Ginter, Li, and Nobakht teach the use of related applications. They teach the use of computers, the use of networks, application program interfaces, and operating systems, the use of volatile memory, the use of nonvolatile memory, the use of tables, the use of files, the use of applications, and the use of functions. Ginter provides receiving requests and integrated circuit modules, Li provides access to volatile memory from applications and the storing of volatile data, and Nobakht provides evaluating whether the requestor is authorized.

23.   As per independent claim 43 and claim 45, the "...storing data produced by a first application within a volatile data file within volatile memory...," is taught by Li at col. 5, lines 47-55 and col. 5, lines 35-36,

the "...in a smart card...," is taught by Nobakht at col. 6, lines 34-35,

and the "...and accessing the volatile data file from a second application...," is taught by Li at col. 5, lines 47-55 and col. 5, lines 35-36.

24.   As per claim 34, the "...data stored in the volatile data file is produced by a first application...," is taught by Li at col. 5, lines 47-55 and col. 6, lines 35-36 and the "...requestor is a second application...," is taught by Nobakht at col. 8, lines 39-41 and col. 7, lines 35-39.

25.   As per claim 37, the "...returning a handle to the volatile data file...," is taught by Tobita at col. 24, lines 1-6, col. 45, lines 66-67, and col. 46, lines 1-8.

26.   As per claim 44, the "...evaluating whether the second application is authorized...," is taught by Nobakht at col. 7, lines 35-39 and col. 8, lines 39-41 and the "...to access the volatile data file...," is taught by Li at col. 5, lines 47-55 and col. 6, lines 34-38.

27.   Claims 46, 47, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobita et al. (U.S. Patent No. 6,421,279) and Ginter et al. (U.S. Patent No. 6,427,140).

28.   Tobita renders obvious independent claim 46 by the following:

"...a processor..." at col. 47, lines 26-29.

"...a memory system operatively coupled to the processor, the memory system including..." at col. 3, lines 56-62 and col. 47, lines 26-29.

"...volatile memory..." at col. 45, lines 66-67 and col. 46, lines 1-8.

"...read-only memory..." at col. 5, lines 27-63.

"...to one or more data files stored in the volatile memory, the nonvolatile memory or the read only memory..." at col. 45, lines 66-67, col. 46, lines 1-8, col. 44, col. 66-67, and col. 45, line 1.

"...includes an access control table configured to restrict access to portions of the memory system..." at col. 22, lines 60-65.

Tobita does not teach the use of reprogrammable non-volatile memory, operating systems, file management systems, and authorized applications.

29.   However, Ginter teaches the use of reprogrammable non-volatile memory, operating systems, file management systems, and authorized applications as follows:

"...electrically reprogrammable non-volatile memory..." at col. 121, lines 13-15.

"...configured to provide an operating system and a file management system..." at col. 15, lines 57-61 and col. 81, lines 34-36.

"...wherein the file management system is configured to manage access..." at col. 81, lines 34-36.

"...wherein the file system..." at col. 81, lines 34-36.

"...to authorized applications..." at col. 232, lines 23-29.

It would have been obvious to one of ordinary skill at the time of the invention to combine Ginter with Tobita to use reprogrammable memory in order to provide audit trails of transactions to define when information was changed and who made the changes. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Ginter with Tobita to use operating systems and a file management systems in order to use the standard technology available on many computer systems and gain more acceptance of the system. Finally, it would have been obvious to one of ordinary skill at the time of the invention to combine Ginter with Tobita to provide only authorized access

to file systems in order to prevent malicious destruction of data in the system and

to provide access to the data by only authorized users. Tobita and Ginter teach

the use of related systems. They teach the use of computers, the use of volatile

memory, the use of nonvolatile memory, the use of tables, the use of files, the

use of file systems, the use of applications, and the use of functions. Tobita

provides a processor with both volatile and nonvolatile memory and a file system

to manage the access of data and Ginter provides operating systems, file

management systems, and authorized applications.

30.   As per claim 47, the "...file system management exposes a set of

application program interfaces...," is taught by Ginter at col. 81, lines 34-36 and

col. 7, lines 37-40,

the "...that are used by an application to request the one or more data files...," is

taught by Tobita at col. 6, lines 52-55 and col. 7, lines 30-34,

the "...stored in the volatile memory and/or the nonvolatile memory...," is taught

by Tobita at col. 45, lines 66-67 and col. 46, lines 1-8.

31.   As per claim 52, the "...at least one application stored in the read

only memory...," is taught by Tobita at col. 6, lines 52-55, col. 44, lines 66-67,

and col. 45, line 1,

the "...and executable on the processor...,"is taught by Tobita at col. 19, lines 65-

67 and col. 20, lines 1-3,

and the "...to request access to the one or more data files...," is taught by Tobita

at col. 7, lines 30-34.

32.   As per claim 53, the "...embodied as a smart card...," is taught by

Ginter at col. 8, lines 1-7.

Allowable Subject Matter

33.   Claims 10-19, 25-27, 29-32, 39-42, and 48-50 are allowed.

34.   Claims 3-6, 22-24, 35, 36, and 48-51 are objected to as being

dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any

intervening claims.

Response to Arguments

35.   Applicant's arguments filed 16 September 2004 have been fully

considered but they are not persuasive. In the first argument concerning insertion

of new matter in the Specification on page 17, paragraphs 3 and 4, the

Applicants state:

"Amendment to provide clear definition of terminology is permitted, as discussed
in MPEP §2163.07, entitled "Amendments to Application Which Are Supported in
the Original Description". This MPEP section states that "Amendments to an
application which are: supported in the original description are NOT new matter."
In a subsection I, entitled "REPHRASING", this MPEP section states that:

Mere rephrasing of a passage does not constitute new matter. Accordingly, a
rewording of a passage where the same meaning remains intact is permissible.
In re Anderson, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973). The mere
inclusion of dictionary or art recognized definitions known at the time of filing an
application would not be considered new matter. If there are multiple definitions
for a term and a definition is added to the application, it must be clear from the
application as filed that applicant intended a particular definition, in order to avoid
an issue of new matter and/or lack of written description. See, e.g., Schering
Corp. v. Amgen, Inc., 222 F.3d 1347, 1352-53, 55 USPQ2d 1650, 1654 (Fed. Cir.
2000).

Accordingly, the amendment to the specification does not comprise new matter."

The examiner disagrees. This amendment is not supported in the Specification

for all of the claims that use the word "expose". This response will be explained in

greater detail to the responses to the second through the fifth arguments.

36.   In the second argument concerning insertion of new matter in the

Specification on page 19, paragraphs 1-6, the Applicants state:

"The Office Action states (p. 3, item 3) that "Where applicant acts as his or her
own lexicographer..." The Office Action states that the term "exposes" in claims
2, 20, 30 and 41 is used to mean "'contains", and that the accepted meaning is ·
"shows" and then states that Applicant's usage gives rise to indefiniteness in
those claims. Applicant finds this puzzling at least in part because the Office
Action does not state that such claims are rejected on indefiniteness grounds.
Clarification is again requested.
Further, the interpretation of the usage of the term "exposes" postulated in the
Office Action (p. 3) is incomprehensible to Applicant. These claims respectively
recite: \
"the file system exposes a set of application program interfaces that are used by
an application" (claim 2);
"An operating system for an integrated circuit (IC) module, comprising: a file
system to manage access to data files stored in both volatile memory and
nonvolatile memory; and an application program interface (API) to expose the file
system to applications" (claim 20);
"exposing functions to manipulate the data files, the same functions being used
regardless of whether the data files are located on the volatile memory or the
nonvolatile memory" (claim 30); and
"exposing a common set of functions to manipulate both the volatile data files
and the nonvolatile data files" (claim 41)."

The Examiner disagrees. The Applicants have merely pointed out where the term

"expose" has been used in the Specification. This argument does not point out

how the term "expose" has clearly and distinctly defined the proposed invention

as expressed in claims 2, 20, 30, 41, and 47.

37.   In the third argument concerning insertion of new matter in the

Specification on page 20, paragraphs 2 and 3 and page 21, paragraphs 1 and 2,

the Applicants state:

"Examples of the use of the term "expose" taken from Applicant's specification
include p. 2, line 16 et seq., which is reproduced hereinbelow in order to assist
the Examiner:
An integrated circuit (IC) module allows volatile data generated by applications to
be stored within volatile data files in the volatile memory. A file system tracks the
location of all data files as residing in either volatile memory, or nonvolatile
memory. The file system then facilitates access to the volatile data files in volatile
memory in a manner similar to accessing nonvolatile data files in nonvolatile
memory.
The file system exposes a set of application program interfaces (APIs) to allow
applications to access the data files. The same APIs are used to access both
volatile data files and nonvolatile data files. When an application requests access
to a data file, the file system initially determines whether the application is
authorized to gain access to the data file. If it is, the file system next determines
whether the data file resides in volatile memory or nonvolatile memory. Once the
memory region is identified, the file system identifies the physical location of the
data file within that memory region.
Additional discussion of the term "expose" is found, as previously noted, at page
5, line 18 et seq., and is reproduced hereinbelow, again in order to assist the
Examiner:
One or more applications 112 and an operating system 114 are stored in ROM
108. Some applications as well as parts of the operating system can reside in
EEPROM as well. When the smart card is coupled to a card reader and receives
power, the application(s) 112 and operating system 114 are executed on the
processor 102. The operating system 114 exposes a set of application program
interfaces (APIs) that enable resident applications 112 to perform tasks and
manipulate data on the smart card. In addition, one or more nonresident
applications 116, which execute external to the smart card (e.g., programs on
kiosks, point-of-purchase machines, etc.), may also place function calls with the
operating system 114 to perform tasks or manipulate data on the smart card.
Examples of such tasks include access security, cryptographic functions (e.g.,
encryption, decryption, signing, and verification), file management, commerce,
and so forth. One suitable operating system is the "Windows for Smart Card"
operating system from Microsoft Corporation.
Applicant is unable to envision how the definition or interpretation contained in
the Office Action could possibly comport with the subject matter recited in these
claims. Clarification is requested."

The examiner disagrees. The applicants have failed to identify which claims

these passages apply to. The examiner assumes that these passages relate to

claim 2. This would leave the use of the word "expose" unexplained for claims

20, 30, 41, and 47.

38.   In the fourth argument concerning insertion of new matter in the

Specification on page 21, paragraph 4 and page 22, paragraph 1, the Applicants

state:

"The Examiner indicates (page 27) that "The Examiner requests further guidance
on which of these definitions is used for the word "expose" in these claims and
strongly recommends that the Applicants find other phrasing for these claims to
more clearly set forth their meaning." Applicant notes that the usage of the term
in these claims is consistent with that used in many other U.S. Patents and
Patent Applications, and also notes that 35 U.S.C. §112, 2ND ¶ clearly states that:
"The specification shall conclude with one or more claims particularly pointing out
and distinctly claiming the subject matter which the applicant regards as his
invention." Accordingly, Applicant is entitled to employ claim language in a
fashion consistent with dictionary definitions and terms of art. Applicant notes an
abundance of published applications and patents employing such language.
Applicant further notes that such is available to the Examiner via the search
capabilities of the USPTO web site."

The examiner disagrees. The paragraph cited clearly allows for the use of the

term "expose" in the specification. However, this argument does not point out

how the term "expose" has clearly and distinctly defined the proposed invention

as expressed in claims 2, 20, 30, 41, and 47.

39.   In the fifth argument concerning insertion of new matter in the

Specification on page 22, paragraph 2, the Applicants state:

"Furthermore, why would the Examiner provide such a strained interpretation of
the term as used in Applicant's claims, yet appear to comprehend usage of the
term as employed, for example, in Ginter et al., U.S. Patent No. 6,427,140, as
relied upon by the Examiner in rejecting Applicant's claims? Ginter uses the term
"expose" or other similar words employing a common root in numerous locations
and contexts, to have different meanings."

The examiner disagrees. The examiner has confirmed that Ginter uses the word

"expose" in the specification for U.S. Patent No. 6,427,140. However, Ginter has

not used the word "expose" in any of its forms in the claims. This is a practice

that I would recommend that the applicant use in this patent application.

40.   In the sixth argument concerning independent claim 1 on page 27,

paragraph 2-4, the Applicants state:

"In contrast, claim 1 recites "An integrated circuit (IC) module comprising: a
processor; volatile memory and nonvolatile memory operatively coupled to the
processor; and a file system to manage access to one or more data files stored
in the volatile memory and in the nonvolatile memory", which is not taught or
disclosed by Tobita.
Applicant's specification states (page 5, line 3 et seq.) that:
Generally, an IC module includes some form of processing capabilities, as well
as limited volatile and nonvolatile memory. IC modules typically do not have their
own power supply, but instead rely on an external power source, such as power
provided by a card reader. In this manner, processing tasks are accomplished
only when power is applied to the IC module. In other implementations, the IC
modules may be implemented as USB Keys, built-into a motherboard of a
computer or even inside of a larger microprocessor or ASIC (Application Specific
Integrated Circuit). For discussion purposes, the IC module is described in the
context of a smart card.
Tobita is silent with respect to any IC module. In fact, Tobita is void of the term
"module"."

In response to applicant's arguments, the recitation "an integrated circuit (IC)

module" has not been given patentable weight because the recitation occurs in

the preamble. A preamble is generally not accorded any patentable weight

where it merely recites the purpose of a process or the intended use of a

structure, and where the body of the claim does not depend on the preamble for

completeness but, instead, the process steps or structural limitations are able to

stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and

Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). The term

"module" is not used in the body of independent claim 1.

41.   In the seventh argument concerning independent claim 1 on page

28, paragraph 2 and 3, the Applicants state:

"To clarify the legal meaning of the term "anticipation", Applicant notes the
language of 35 U.S.C. § 103(a):
A patent may not be obtained though the invention is not identically disclosed or
described as set forth in section 102 of this title, if the differences between the
subject matter sought to be patented and the prior art are such that the subject
matter as a whole would have been obvious at the time the invention was made
to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was
made.
This language sets forth Congressional intent in clear and exact terms as to what
does or does not comprise anticipation, as compared to unpatentability. The
reference must contain, within its four corners, exactly the subject matter of the
claim, as it appears in the claim, in order to support a valid finding of
anticipation."

The examiner disagrees. The applicant has properly quoted the language of 35

U.S.C. §103(a). The applicant provides a narrow interpretation of this paragraph,

which is contrary to the practices of the U.S. Patent and Trademark Office. The

office action points out that all of the elements in the body of independent claim 1

have been found in the Tobita reference.

42.   In the eighth argument concerning independent claim 1 on page 28,

paragraph 4 and page 29, paragraphs 1 and 2, the Applicants state:

"It is thus inappropriate to combine elements "picked and chosen" from diverse
embodiments in attempting to arrive at a finding of anticipation. In part, this is
because a finding of anticipation involves determining that the subject matter
recited in the claim is already in the public domain, using the rules of evidence
set forth in the statute and which are further interpreted in the MPEP and case
law. In order to provide evidence of anticipation, the reference must, within its
four corners, set forth this subject matter (item (ii) supra) and enable (item (iv)
supra) exactly as it appears in the claim.
In other words, selecting elements from diverse portions of the reference
comprises impermissible modification of (e.g., addition to) the teachings of the
reference (i.e., see item (iii) supra). Further, because none of items (ii)-(iv)
needed in order to provide a valid finding of anticipation are met, item (v) cannot

be met. The rejection of claim 1 fails at least four necessary criteria needed in order to determine that the subject matter of the claim is anticipated."

The examiner disagrees. Anticipation allows an examiner to combine elements

found in different embodiments of an invention provided that these combinations

do not modify the elements found in the invention. The selection of these

elements has not modified any of these elements. All of the elements found in

the body of independent claim 1 are also found in the Tobita reference.

   43.   In the ninth argument concerning independent claim 1 on page 29,

paragraph 5 and page 30, paragraphs 1-3, the Applicants state:

"Applicant further notes that it is well established that old elements may be combined to provide results not suggested by references and thereby to be patentable. "The patentability of such combinations is of ancient authority." *Prouty v. Draper*, 41 U.S. (16 Pet.) 336, 341 (1842); *Eames v. Godfrey*, 68 U.S. (I Wall.) 78,79-80 (1863); *Gill v. Wells*, 89 U.S. (22 Wall.) 1, 25 (1874); see also H.T. Markey, Why not the Statute?, 65 J. Pat. Off. Soc'y., 331, 333-34 (1983) ("virtually all inventions are 'combinations', and ... every invention is formed of 'old elements' .... Only God works from nothing. Man must work with old elements"). These principles of patent law are repeated in many other cases, including In re Wright, 6 USPQ2d 1959 (CAFC) and *Fromson v. Advance Offset Plate, Inc.*, 225 USPQ2d 26 (CAFC).
The latter case further states that "There is no basis in the law, however, for treating combinations of old elements differently in determining patentability. See *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d at 1540, 218 USPQ at 880." As noted in *Diamond v. Chakrabarty*, 206 USPQ 193, 196, the Supreme Court stated that "We have also cautioned that courts "should not read into the patent laws limitations and conditions with the legislature has not expressed." *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 199, 17 USPQ 154, 162 (1933)." As a result, demonstrating that some of the elements recited in a claim are found in the prior art does not provide a basis for a rejection, and does not provide a basis for anticipation. Accordingly, the anticipation rejection of claim 1 is prima facie defective and should be withdrawn and claim 1 should be allowed."

The examiner disagrees. Anticipation allows an examiner to combine elements

found in an invention provided that these combinations do not modify the

elements found in the invention. The selection of these elements has not

modified any of these elements. All of the elements found in the body of

independent claim 1 are also found in the Tobita reference.

    44.   In the tenth argument concerning claim 8 on page 30, paragraph 5

and page 30, paragraphs 1-3, the Applicants state:

"The Office Action cites col. 6, lines 52-55 as teaching this aspect of the claimed
subject matter. Col. 6, lines 52-55 states that: "If all the above-mentioned points
are implemented, the three types of memory can cover various applications and
the number of parts can be reduced compared with installation of a memory for
each application." "Application", as employed in this passage, does not refer to
any "application ... executable by the processor" or to such that is executable "to
request access to the one or more data files" as recited in claim 8."

The Examiner disagrees. Applicant's arguments with respect to claim 8 have

been considered but are moot in view of the new ground(s) of rejection. The

Ginter reference has been added to the Tobita reference. Ginter teaches the use

of applications as follows:

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"...In this example, ROS 602 includes an operating system
("OS") "core" 679, a user Application Program Interface
("API") 682, a "redirector" 684, an "intercept" 692, a User
Notification/Exception Interface 686, and a file system
687..." at col. 79, lines 24-28.
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    45.   In the eleventh argument concerning claim 8 on page 32,

paragraph 4, the Applicants state:

"The Office Action also cites col. 45, line 66 through col. 46, line 8 as providing
teaching of this affirmatively-recited aspect of the subject matter of claim 8. This
passage, which previously reproduced with reference to claim 1, is void of any
mention of the word "application" and as such cannot possibly provide the
subject matter for which it is cited, The Examiner fails to respond to this
argument as well."

The Examiner disagrees. Applicant's arguments with respect to claim 8 have

been considered but are moot in view of the new ground(s) of rejection. The

Ginter reference has been added to the Tobita reference. Ginter teaches the use

of applications at col. 79, lines 24-28 as shown in the response to the tenth

argument.

46.   In the twelfth argument concerning claim 8 on page 33, paragraph

2, the Applicants state:

"Col. 19, line 65 through col. 20, line 3 refers to the first embodiment (col. 18, line
19) and thus this passage is disjoint from the other portions cited in conjunction
with rejection of claim 8 and accordingly is inapposite thereto with respect to
anticipation. Again, the Examiner fails to respond to this legal argument."

The Examiner disagrees. Applicant's arguments with respect to claim 8 have

been considered but are moot in view of the new ground(s) of rejection. The

Ginter reference has been added to the Tobita reference. Claim 8 is now rejected

under 35 U.S.C. 103(a).

47.   In the thirteenth argument concerning claim 8 on page 33,

paragraph 3, the Applicants state:

"Further, the paragraph extending from col. 19, line 63 to col. 20, line 10 (copy
provided in the Response dated Dec. 23, 2003), which includes this passage,
provides no teaching or disclosure of the subject matter which it is cited as
representing. Clarification is again requested."

The examiner disagrees. This passage uses the word "executing" multiple times.

In a computer environment execution always takes place by a processor.

48.   In the fourteenth argument concerning independent claim 20 on

page 36, paragraph 2, the Applicants state:

"The portions (col. 4, lines 58-60 and col. 31, lines 32-54) of Tobita cited in the
Office Action (p. 13, item 28) as providing "... a file system to manage access to
data files ...." are explicitly stated to use a flash memory, i.e., a nonvolatile
memory, as a storage medium. Col. 4, lines 58-60 states that: "It is therefore an
object of the invention to provide a file system using a high-performance and
inexpensive flash memory as storage media." In contrast to both the Office
Action and Tobita, claim 20 recites "a file system to manage access to data files

stored in both volatile memory and nonvolatile memory". As noted above, Tobita teaches use of volatile memory as a write buffer and thus has no need to manage access to data files stored in both volatile memory and nonvolatile memory. The latter passage describes temporary use of SRAM as a write buffer 2006 to aid in the speed with which files can be transferred from a host to flash memory and does not describe a file system as recited in claim 20."

The examiner disagrees. The temporary storing of data in volatile memory is still storing data in volatile memory. Any data may be stored in the volatile memory.

The body of independent claim 20 does not establish a period of time that data must be stored in volatile memory to qualify as being stored in volatile memory.

49.   In the fifteenth argument concerning independent claim 20 on page 36, paragraph 3 and page 37, paragraph 1, the Applicants state:

"The portion (col. 45, line 66 through col. 46, line 8) of Tobita cited (p. 15) in the Office Action as providing a portion of the affirmatively-recited "file system to manage access to data files stored in both volatile memory and nonvolatile memory ..." of claim 20 refers (see col. 45, line 64 et seq.) to a fourth embodiment again involving use of RAM for temporarily storing (see col. 46, line 6) data as a step towards storage of the data in nonvolatile memory for subsequent access. This passage merely describes a cache memory for a write buffering system in conjunction with a fourth embodiment of the disclosure of Tobita."

The examiner disagrees. As stated in the response to the fourteenth argument, the temporary storing of data in volatile memory is still storing data in volatile memory. Any data may be stored in the volatile memory. The body of independent claim 20 does not establish a period of time that data must be stored in volatile memory to qualify as being stored in volatile memory.

50.   In the sixteenth argument concerning independent claim 20 on page 37, paragraph 1, the Applicants state:

"There is no suggestion or motivation identified by the Office Action within Tobita to "mix and match" diverse aspects of the disclosure of Tobita. As noted

elsewhere, 'obvious to try' is not an appropriate standard for a finding of unpatentability, and hindsight reconstruction is similarly inapposite to a legal determination of unpatentability."

The examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

      51.   In the seventeenth argument concerning independent claim 20 on page 38, paragraph 3, the Applicants state:

"The portions (col. 4, lines 58-60 and col. 6, lines 52-55) of Tobita cited (p. 15) in the Office Action as corresponding to "... to expose the file system to applications..." respectively refer to flash memory and multiple memories but are void of any mention of anything recognizably related to "an application program interface (API) to expose the file system to applications", as recited in claim 20. This passage has no discernible relationship to the subject matter of claim 20. Clarification of the rejection is respectfully requested."

The examiner disagrees. In the previous office action, Li taught these elements. Applicant's arguments with respect to claim 20 have been considered but are moot in view of the new ground(s) of rejection. The Ginter reference has replaced the Li reference. Ginter teaches the use of applications and application program interfaces at col. 79, lines 24-28 as shown in the response to the tenth argument.

      52.   In the eighteenth argument concerning independent claim 20 on page 38, paragraph 4 and page 39, paragraph 1, the Applicants state:

"The Office Action also cites col. 5, lines 52-55 with respect to this portion of claim 20. Col. 5, lines 50 et seq. states that: "the first management information, and the second management information for controlling input/output of data from/to the external system and for temporarily storing write data into the first nonvolatile memory from the external system in the volatile memory and then transferring the write data from the volatile memory to the first nonvolatile memory, and the consecutive address generation means and the sector address storage means for outputting the physical sector address and the consecutively generated addresses to the first nonvolatile memory and the volatile memory when data at the physical sector address is output from the first nonvolatile memory or when data at the physical sector address is input to the volatile memory." This passage again describes use of volatile memory as a write buffer and has no apparent relationship to the subject matter of claim 20. Clarification of the rejection is respectfully requested."

The examiner disagrees. As stated in the response to the fourteenth argument, the temporary storing of data in volatile memory is still storing data in volatile memory. Any data may be stored in the volatile memory. The body of independent claim 20 does not establish a period of time that data must be stored in volatile memory to qualify as being stored in volatile memory.

53.   In the nineteenth argument concerning independent claim 20 on page 39, paragraphs 2 and 3, the Applicants state:

"The passing mention of "application" in col. 6 refers to a field of deployment for the system and does not refer to an application program.
The Office Action cites (p. 15) Li at col. 6, lines 31-37 as providing an application program interface. The application program interface 125 is described in this passage exclusively in the context of nonvolatile memories (device module 135, Fig. 3, listing mini disk, hard disc, flash ROM, CD ROM, tape). As a result, the proposed combination does not and cannot render unpatentable the subject matter recited in claim 20."

The examiner disagrees. In the previous office action, Li taught these elements.

Applicant's arguments with respect to claim 20 have been considered but are moot in view of the new ground(s) of rejection. The Ginter reference has replaced the Li reference. Ginter teaches the use of applications at col. 79, lines 24-28 as

shown in the response to the tenth argument. Tobita teaches "a file system to manage access to data files" at col. 4, lines 58-60 and col. 31, lines 32-54 and "stored in both volatile memory and nonvolatile memory" at col. 45, lines 66-67 and col. 46, lines 1-8 and Ginter teaches "to expose the file system to applications..." at col. 79, lines 24-28 and "and an application program interface (API)" at col. 79, lines 24-28.

54.   In the twentieth argument concerning claim 2, independent claim 20, and claim 21 on page 39, paragraph 4 and page 40, paragraph 1, the Applicants state:

"The rejections based on combinations of elements taken from LI and Tobita, and the rejection of claims 2, 20 and 21, fail to meet the standards for a finding of unpatentability set forth in MPEP §2143, entitled "Basic Requirements of a Prima Facie Case of Obviousness" (see also MPEP §706.020), §2141 et seq, and §2142), as was explained in the Response dated Dec. 23, 2003 with respect to all of the unpatentability rejections. Further, the Office Action identifies no teaching whatsoever in Li or Tobita of the subject matter recited in these claims. Additionally, there is no teaching or disclosure, or guidance, suggestion or motivation identified in the references or by the Office Action to attempt to combine or modify, or to aid one of ordinary skill in picking and choosing elements from the diverse embodiments of the references or in assembling those elements to attempt to arrive at the subject matter of any of Applicant's claims. As such, the rejection appears to employ an inappropriate 'obvious to try' standard of unpatentability."

The examiner disagrees. Applicant's arguments with respect to claims 2, 20, and 21 have been considered but are moot in view of the new ground(s) of rejection. The Ginter reference has replaced the Li reference. The justifications for combining Tobita and Ginter for claims 2 and 20 state that it would have been obvious to one of ordinary skill at the time of the invention to combine Ginter with Tobita to use application programs in order to provide users with a means of

introduce their own programs into the system to provide additional functionality

and to provide application program interfaces in order to allow the systems

programs to interface with the application programs. Claim 21 is covered by the

justification for independent claim 20.

55.   In the twenty-first argument concerning claim 2, independent claim

20, and claim 21 on page 40, paragraphs 2 and 3, the Applicants state:

"Such is improper, as is discussed below in more detail with reference to MPEP
§2145(X)(B), entitled "Obvious To Try Rationale". This MPEP section states that
"The admonition that 'obvious to try' is not the standard under §103 has been
directed mainly at two kinds of error. In some cases, what would have been
'obvious to try' would have been to vary all parameters or try each of numerous
possible choices until one possibly arrived at a successful result, where the prior
art gave either no indication of which parameters were critical or no direction as
to which of many possible choices is likely to be successful. In others, what was
'obvious to try' was to explore a new technology or general approach that
seemed to be a promising field of experimentation, where the prior art gave only
general guidance as to the particular form of the claimed invention or how to
achieve it." In re O'Farrell, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir.
1988) (citations omitted)".
In this instance, no guidance in selecting some but not others of the many
elements from the many embodiments of the references is identified. Similarly,
no direction as to which of many possible choices is likely to be successful has
been identified."

The examiner disagrees. For both claim 2 and independent claim 20, the

justifications for combining Tobita and Ginter for claims 2 and 20 are provided in

the response to the twentieth argument. The office action also states that Tobita

and Ginter teach related systems. Tobita and Ginter teach the use of computers,

the use of volatile memory, the use of nonvolatile memory, the use of tables, the

use of files, the use of file systems, the use of applications, and the use of

functions. Tobita provides a processor with both volatile and nonvolatile memory

and a file system to manage the access of data and Ginter provides application

programs. This indicates that the applications from Tobita and Ginter could be readily combined into an operational application since they are compatible and commonly use several important components. Since claim 21 is dependent on independent claim 20, the responses for independent claim 20 apply to claim 21.

56.   In the twenty-second argument concerning claim 2, independent claim 20, and claim 21 on page 40, paragraph 4 and page 41, paragraph 1, the Applicants state:

"As there is no basis for the Examiner's contentions within the cited references, the only possible motivation for these contentions is hindsight reconstruction wherein the Examiner is utilizing Applicant's own disclosure to construct a reason for combining and/or modifying the teachings of the cited references. The Examiner is reminded that hindsight reconstruction is not an appropriate basis for a § 103 rejection. (See, e.g., *Interconnect Planning Corp. v. Feil*, 227 USPQ 543, 551 (Fed. Cir. 1985); *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990) (explaining that hindsight reconstruction is an improper basis for rejection of a claim).)"

The Examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

57.   In the twenty-third argument concerning independent claim 32, on page 50, paragraph 2, the Applicants state:

"The Office Action cites (p. 8; see also p. 34, item 75) col. 6, lines 16-19 of Chen with respect to "means for identifying whether the data file is located in volatile

memory or nonvolatile memory". The NVMEN flea 240 taught by Chen is used
(col. 6, line 3 et seq.) to determine whether to access an internal SRAM 234 or
SFR 240 or a nonvolatile memory 220. It has no particular relationship to any
data file (see, e.g., Table 1) and may be set by either internal or external
programs (see line 14). Clarification is respectfully requested."

The examiner agrees. Whereas, Chen teaches a means for identifying whether

the data is located in volatile memory or nonvolatile memory, Chen does not

teach the use of files or even records. No other reference has been found to

correct this deficiency. For this reason, claims 10-19, 25-27, 29-32, and 39-42

are allowed and claims 3-6, 22-24, 35, and 36 are objected to. There will be no

other responses for any of the arguments presented for these claims in this office

action.

58.   In the twenty-fourth argument concerning independent claim 28 on

page 51, paragraph 3 and page 52, paragraphs 1 and 2, the Applicants state:

"Yet further, independent claim 28 recites "A computer-readable medium storing
computer-executable instructions that, when executed on a smart card, direct the
smart card to: store data in a volatile data file within volatile memory of the smart
card; and facilitate access to the volatile data file by one or more applications",
which is not taught, disclosed, suggested or motivated by the cited references,
alone or in combination.
The Office Action cites (p. 20) Tobita at col. 6, lines 52-54 and col. 7, lines 30-34
as providing "... and facilitate access to the volatile data file by one or more
applications ...". As noted above, the passing mention of "application" in col. 6 is
a reference to a field of deployment and not to a software application executing
on a processor. As noted above with reference to claim 18, the passage in col.
7 is unrelated to handling any request for stored data files and instead relates
to storage of data.

The examiner disagrees. Applicant's arguments with respect to claim 28 have

been considered but are moot in view of the new ground(s) of rejection. Tobita

has been eliminated as a reference. This claim is now rendered obvious by a

combination of Li and Nobakht. Li teaches "and facilitate access to the volatile

data file by one or more applications" at col. 5, lines 47-55 and col. 6, lines 31-37

and "store data in a volatile data file within volatile memory" at col. 5, lines 47-55

and Nobakht teaches "of the smart card" at col. 6, lines 34-35. This action states

that it would have been obvious to one of ordinary skill at the time of the

invention to combine Nobakht with Li to use smart cards in order to include

information to the system that is specific about the owner of the smart card.

59.   In the twenty-fifth argument concerning independent claim 28 on

page 53, paragraph 5 and page 54, paragraph 1, the Applicants state:

"With respect to claim 28, Nobakht is cited (p. 19) as providing "...of the smart
card...". However, this excerpt as provided in the Office Action fails to reflect the
recitation of claim 28. Claim 28 recites "...computer-executable instructions that,
when executed on a smart card, direct the smart card to: store data in a volatile
data file within volatile memory of the smart card..." Nobakht describes a
conventional smart card 232 having a nonvolatile memory 330 (see fig. 3B; col.
6, lines 42-49) and provides no mention of any volatile memory or volatile data
files in the context of the smart card 232. Nobakht fails to provide (i) execution of
computer-executable instructions (ii) that, when executed on a smart card (iii)
store data in a volatile data file (iv) within a volatile memory (v) on a smart card,
as recited in claim 28."

The examiner disagrees. Claim 28 is now rendered obvious by a combination of

Li and Nobakht. Li teaches "and facilitate access to the volatile data file by one or

more applications" at col. 5, lines 47-55 and col. 6, lines 31-37 and "store data in

a volatile data file within volatile memory" at col. 5, lines 47-55. There is no

requirement for Nobakht to teach these features.

60.   In the twenty-sixth argument concerning independent claim 33 on

page 56, paragraphs 3 and 4 and page 57, paragraph 1, the Applicants state:

"Independent claim 33 recites "A method comprising: storing data in a volatile
data file in volatile memory of an integrated circuit module; receiving, from a
requestor, a request to access the volatile data file on the integrated circuit

module; evaluating whether the requestor is authorized to access the volatile
data file; and in an event that the requestor is authorized, locating the volatile
data file in the volatile memory", which is not taught, disclosed, suggested or
motivated by the cited references, alone or in combination.
The Office Action cites (p. 20) Tobita at col. 6, lines 20-22 and col. 45, line
66 though col. 46, line 8 with respect to claim 33. These portions of Tobita have
been discussed above with reference to the rejection of claim 18 and claim 20.
The Office Action also cites col. 7, lines 3-5. This passage is exclusively devoted
to storage of data in flash (nonvolatile) memory. However, claim 33 recites
"...storing data in a volatile data file in volatile memory...." and thus is unrelated to
that aspect of Tobita."

The examiner disagrees. Tobita teaches the temporary storage of data in volatile

memory col. 45, line 66 though col. 46, line 8. The claim does not state how long

data must be stored in memory in order to qualify for being stored in memory.

This action teaches that it would have been obvious to one of ordinary skill at the

time of the invention to combine Li with Ginter to locate, access, and store data in

volatile memory in order have rapid access to data in memory and it would have

been obvious to one of ordinary skill at the time of the invention to combine

Nobakht with Ginter and Li to evaluate whether the requestor is authorized in

order to protect the security of the system and allow only authorized users

access to the system data.

     61.   In the twenty-seventh argument concerning independent claim 33

on page 57, paragraph 2, the Applicants state:

"The Office Action also cites (p. 20) col. 31, lines 32-35 of Tobita with reference
to access of a volatile data file. As noted above with respect to claim 20, col. 31,
lines 32-54 of Tobita describes temporary use of SRAM as a write buffer 2006 to
aid in the speed with which files can be transferred from a host to flash memory
and does not describe a volatile data file or such that can be accessed."

The examiner disagrees. Tobita teaches the temporary storage of data in volatile

memory col. 45, line 66 though col. 46, line 8. The claim does not state how long

data must be stored in memory in order to qualify for being stored in memory.

62.   In the twenty-eighth argument concerning independent claim 33 on

page 57, paragraph 3 and page 58, paragraphs 1 and 2, the Applicants state:

The Office Action further cites col. 45, line 66 through col. 46, line 8,
which has
been previously discussed supra. These; passages are non sequitur with
respect to
any volatile data file or access thereto.
"The Office Action further cites (p. 20) col. 46, lines 59-66 of Tobita as providing
"...locating the volatile data file in the volatile memory...". Col. 46, line 59 et seq.
states that:
Referring again to FIG. 82, the CPU 4001 accesses the cache memory 4003 via
the memory bus 4007. The access address is input to the address comparison
circuit 4005, which then compares the address with addresses previously
registered in the address array 4004. If the address matches one; of the
registered addresses, which will be hereinafter referred to as an "address hit,"
the controller 4006 accesses the location in the cache memory 4003
corresponding to the address. In contrast, if the address does not match any of
the registered addresses, which will be hereinafter referred to as an "address
miss," the controller 41006 registers the address in the address array 4004. After
this, the controller 4006 transfers the data corresponding to the address to the
cache memory for storage and accesses the location in the flash memory 4002
corresponding to the address.
Consonant with the above description, cache memories are not generally used to
store data files and the above passage certainly does not describe or suggest
such. Cache memories typically are limited-capacity but very high speed
memories that are very tightly coupled to a processor. Cache memories are used
to store addresses and/or data elements and/or instructions that are repeatedly
demanded by the processor. Cache memories are employed for these purposes
and within this operational purview because this can significantly reduce memory
access time, particularly with tasks involving repetitive processor instructions or
memory accessions, and thus increase overall system operation speed. Storing
data files in a cache memory completely defeats their intended purpose.
Employing a reference in a manner that defeats its intended purpose is improper,
as is explained below in more detail with reference to MPEP §2143.01, entitled
"Suggestion or Motivation to Modify the References".
In a subsection entitled "THE PROPOSED MODIFICATION CANNOT RENDER
THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE", this

MPEP section states that: "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)..."

The examiner disagrees. Locating data is a prerequisite to accessing data.

Tobita teaches the temporary storage of data in volatile memory col. 45, line 66

though col. 46, line 8. The claim does not state how long data must be stored in

memory in order to qualify for being stored in memory. There has been no

modification of the Tobita reference.

      63.   In the twenty-ninth argument concerning independent claims 38,

43, and 45 on page 60, paragraph 1, the Applicants state:

"As well, independent claim 38 recites "A computer-readable mediumstoring computer-executable instructions that, when executed on a processor, cause the processor to perform acts of: storing data in a volatile data file in volatile memory of an integrated circuit module; receiving, from a requestor, a request to access the volatile data file on the integrated circuit module; evaluating whether the requestor is authorized to access the volatile data file; and in an event that the requestor is authorized, locating the volatile data file in the volatile memory", while independent claim 43 recites "A method comprising: storing data produced by a first application within a volatile data file within volatile memory in a smart card; and accessing the volatile data file from a second application" and claim 45 recites "A computer-readable medium storing computer-executable instructions that, when executed on a processor, cause the processor to perform acts of: storing data produced by a first application within a volatile data file within volatile memory in a smart card; and accessing the volatile data file from a second application" which recitations are not taught, disclosed, suggested or motivated by the cited references, alone or in combination."

The examiner disagrees. This appears to be a summation paragraph for

independent claims 38, 43, and 45. For this reason a detailed response will not

be provided.

      64.   In the thirtieth argument concerning independent claim 46 on page

60, paragraph 3 and page 61 paragraphs 1 and 2, the Applicants state:

"Claim 46 recites "An integrated circuit (IC) module comprising: a processor; a
memory system operatively coupled to the processor, the memory system
including: volatile memory; electrically reprogrammable nonvolatile memory;
read-only memory configured to provide an operating system and a file
management system, wherein the file management system is configured to
manage access to one or more data files stored in the volatile memory, the
nonvolatile memory or the read only memory, wherein the file system includes an
access control table configured to restrict access to portions of the memory
system to authorized applications", which is not taught, disclosed, suggested or
motivated by the cited references, alone or in any proper combination.
The Office Action cites (p. 22, item 54) portions of Tobita discussed hereinabove
and proposes to combine these with elements taken from widely-varying portions
of Ginter. The combination fails to provide the subject matter of claim 46, and the
Office Action identifies no suggestion or motivation in the references to motivate
such selection or to aid one in determining which bits and pieces to select or to
show how to combine them. As such, the Office Action again appears to be
employing an 'obvious to try' standard for finding unpatentability coupled with
improper hindsight reconstruction."

The examiner disagrees. This office action states that it would have been

obvious to one of ordinary skill at the time of the invention to combine Ginter with

Tobita to use reprogrammable memory in order to provide audit trails of

transactions to define when information was changed and who made the

changes. Likewise, it would have been obvious to one of ordinary skill at the time

of the invention to combine Ginter with Tobita to use operating systems and a file

management systems in order to use the standard technology available on many

computer systems and gain more acceptance of the system. Finally, it would

have been obvious to one of ordinary skill at the time of the invention to combine

Ginter with Tobita to provide only authorized access to file systems in order to

prevent malicious destruction of data in the system and to provide access to the

data by only authorized users. In response to applicant's argument that the

examiner's conclusion of obviousness is based upon improper hindsight

reasoning, it must be recognized that any judgment on obviousness is in a sense

necessarily a reconstruction based upon hindsight reasoning. But so long as it

takes into account only knowledge which was within the level of ordinary skill at

the time the claimed invention was made, and does not include knowledge

gleaned only from the applicant's disclosure, such a reconstruction is proper.

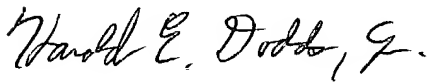See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

65.   Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Harold E. Dodds, Jr.

whose telephone number is (703)-305-1802. The examiner can normally be

reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John E. Breene can be reached on (703)-305-9790. The

fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

Harold E. Dodds, Jr.
Patent Examiner
September 29, 2004

GRETA ROBINSON
PRIMARY EXAMINER